

Appl. No. 09/275,722

Attorney Docket: 042390. P6526

**REMARKS**

The above referenced patent application has been reviewed in light of the Office Action, dated March 10, 2006, in which:

- Claims 23-27 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite;
- claims 1-18 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter;
- claims 19-27 are rejected under 35 U.S.C. § 102(e) on Lotspiech *et al.* (hereinafter 'Lotspiech,' U.S. Patent No. 6,118,873);
- claims 11 and 13-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lotspiech;
- and, it is noted that, claims 1-10 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 101 above.

Reconsideration of the above referenced patent application in view of the foregoing amendments and the following remarks is respectfully requested.

A Petition for Extension of Time in order to extend the period for response 1 month(s), including the appropriate fee, is filed herewith.

Claims 1-10 are now pending the above referenced patent application. No claims have been amended, or added. Claims 11-27 have been cancelled but may be pursued in a continuation application; therefore, no prosecution history estoppel results from their cancellation.

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**1. 35 U.S.C. § 112*****1.1. Claims 23-27***

The PTO has rejected claims 23-27 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. These claims have been cancelled but may be pursued in a continuation application; therefore, no prosecution history estoppel results from their cancellation. It is, therefore, respectfully requested that the objection of these claims be withdrawn.

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## 2. 35 U.S.C. § 101

### 2.1. Claims 1-18

The PTO has rejected claims 1-18 are rejected under 35 U.S.C. § 101.

Claims 11-18 have been cancelled but may be pursued in a continuation application; therefore, no prosecution history estoppel results from their cancellation. It is, therefore, respectfully requested that the objection of claims 11-18 be withdrawn.

The rejection of claims 1-10 by the PTO is respectfully traversed.

It is also respectfully noted that this rejection was raised and successfully overcome in the May 27, 2003 Office Action and subsequent Reply.

35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

In the March 10, 2006 Office Action the PTO states on page 4, line 14 – page 5, line 2:

Independent claims 1 and 11 recite a series of abstract steps in an algorithm that ultimately produces a shared secret key; however, it is clear from the disclosure that the producing step at most only relates to creating a piece of data (the shared secret key) per se, without communicating said shared secret key or disclosing it in any way such that it could be operated by any other entity. ... Thus, the end result of the claimed process is a thought or result of a computation of a processor, which is not a tangible result as dictated by statute and current Office practice.

Applicant begins with claim 1. Claim 1 recites:

- 1 1. A method comprising:
- 2 providing a key matrix having N rows and M columns of matrix keys, where N $\geq$ 2 and
- 3 M $\geq$ 2;
- 4 dedicating the rows of the key matrix to a first classification;

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5 for each column of the key matrix, performing arithmetic operations utilizing matrix keys  
 6 of at least two selected rows of the key matrix to produce a secret device key which is part of a  
 7 first set of secret device keys;  
 8 producing a shared secret key based on arithmetic operations on selected secret device  
 9 keys of the first set of secret device keys.

Applicant respectfully asserts that the PTO is applying an incorrect test to determine statutory subject matter under 35 U.S.C. §101 and that if the correct test as dictated by statute, current Federal Court decisions, and Board of Patent Appeals and Interferences (BPAI) decisions is applied the claims are rejection should be withdrawn.

It is respectfully asserted that the PTO is attempting to apply a version of the "technical arts" test that was rejected in *Ex Parte Lundgren*, BPAI Appeal No. 2003-2088 (2004). Specifically, the PTO asserts in the issue of the present application is that "the end result of the claimed process is a thought". This is almost identical to the issue of *Lundgren* that asserted a test where "these claims . . . are directed to non-statutory processes merely because some or all of the steps therein can also be carried out in or with the aid of the human mind or because it may be necessary for one performing the processes to think."

*Ex Parte Lundgren* states on page 6, line 22 – page 8, line 9:

The examiner finds the separate "technological arts" test in *In re Musgrave*, 431 F.2d 882, 167 USPQ 280 (CCPA 1970); *In re Tama*, 575 F.2d 872, 197 USPQ 852 (CCPA 1978); and *Ex parte Bowman*, 61 USPQ2d 1669 (Bd. Pat. App. & Int. 2001)(non-precedential). We have reviewed these three cases and do not find that they support the examiner's separate "technological arts" test.

In *Musgrave*, the court reversed a rejection under 35 U.S.C. § 101 that the claims under review therein were non-statutory because it disagreed with the Board that "these claims . . . are directed to non-statutory processes merely because some or all of the steps therein can also be carried out in or with the aid of the human mind or because it may be necessary for one performing the processes to think." *Musgrave* 431 F.2d at 893, 167 USPQ 289. After so holding, the court went on to observe "[a]ll that is necessary, in our view, to make a sequence of operational steps a statutory 'process' within 35 U.S.C. § 101 is that it be in the technological arts so as to be in consonance with the Constitutional purpose to promote the progress of 'useful arts.' Const. Art. I, sec. 8."

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We do not view the court's statement in *Musgrave* in regard to the technological arts to have created a separate "technological arts" test in determining whether a process is statutory subject matter. Indeed, the court stated as much in *Toma*. The court first noted that the examiner in that case had "cited [*inter alia*, *Musgrave*] for the proposition that all statutory subject matter must be in the 'technological' or 'useful' arts...." *Toma*, 575 F.2d at 877, 197 USPQ at 857. The court then stated that cases such as *Musgrave* involved what was called at that time a "mental steps" rejection and observed, "[t]he language which the examiner has quoted was written in answer to 'mental steps' rejections and was not intended to create a generalized definition of statutory subject matter. Moreover, it was not intended to form a basis for a new § 101 rejection as the examiner apparently suggests." *Id.* at 878, 197 USPQ at 857. We do not believe the court could have been any clearer in rejecting the theory the present examiner now advances in this case.

and on page 9, lines 1-4

Our determination is that there is currently no judicially recognized separate "technological arts" test to determine patent eligible subject matter under § 101. We decline to create one. Therefore, it is apparent that the examiner's rejection can not be sustained.

In the March 10, 2006 Office Action, the PTO stated (page 2, line 16) that "the utility of the claims was not in dispute".

Therefore,

it can be concluded that the examiner has found that the process claims on appeal produce a useful, concrete, and tangible result. Since the Federal Circuit has held that a process claim that applies a mathematical algorithm to "produce a useful, concrete, tangible result without pre-empting other uses of the mathematical principle, on its face comfortably falls within the scope of § 101," *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358, 50 USPQ2d 1447, 1452 (Fed. Cir. 1999), one would think there would be no more issues to be resolved under 35 U.S.C. § 101.

*Ex Parte Lundgren* page 5, lines 6 – 16.

Further support for Applicants position that the claim is statutory subject matter may be found in *Ex Parte Lundgren* on pages 62 and 63. This section states six conclusions from the *State Street*, 149 F.3d 1368 (1998) test for allowable § 101 matter. Specifically, element four:

*Fourth*, no physical transformation had to take place outside of the machine, i.e., the computed end result did not have to control some external system.

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and element five, which states:

Thus, a computer-implemented process would normally be a statutory "process," and also produce a "concrete and tangible result," because the computer is physical and transforms electrical signals

It is respectfully asserted that the PTO has failed to support a proper § 101 rejection for a variety of reasons and that the rejection be withdrawn. Likewise, claims 2-10 are patentable for similar reasons. It is, therefore, respectfully requested that the rejection of these claims also be withdrawn.

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### 3. 35 U.S.C. § 102

#### 3.1. *Lotspiech: Claims 19-27*

The PTO has rejected claims 19-27 under 35 U.S.C. § 102(e) as being anticipated by Lotspiech. These claims have been cancelled but may be pursued in a continuation application; therefore, no prosecution history estoppel results from their cancellation. It is, therefore, respectfully requested that the objection of these claims be withdrawn.

### 4. 35 U.S.C. § 103

#### 4.1. *Lotspiech: Claims 11 and 13-18*

The PTO has also rejected claims 11 and 13-18 under 35 U.S.C. § 103(a) based upon Lotspiech, alone. These claims have been cancelled but may be pursued in a continuation application; therefore, no prosecution history estoppel results from their cancellation. It is, therefore, respectfully requested that the objection of these claims be withdrawn.

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**CONCLUSION**

In view of the foregoing, it is respectfully asserted that all claims pending in this application, as amended, are in condition for allowance. If the Examiner has any questions, they are invited to contact the undersigned at 503-264-7002. Reconsideration of this patent application and early allowance of all claims is respectfully requested.

Respectfully submitted,

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/s/Justin B. Scout/Reg. No. 54,431/  
Justin B. Scout  
Reg. No. 54,431

Intel Corporation  
M/S - JF3-147  
2111 NE 25<sup>th</sup> Avenue  
Hillsboro, OR 97124  
503-264-7002